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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,992	04/16/2004	Garrett Doss	BWC-163US	8738
23122	7590	04/23/2007		
RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			EXAMINER KOEHLER, CHRISTOPHER M	
			ART UNIT	PAPER NUMBER
			3726	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/23/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/825,992

Applicant(s)

DOSS ET AL.

Examiner

Christopher M. Koehler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 16-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-15 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/16/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Group I, claims 1-15 in the reply filed on 12/29/2006 is acknowledged.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 9 recites the limitation "an edge portion of the plate" in line 2. There is insufficient antecedent basis for this limitation in the claim. The edge portion of the plate was previously identified in claim 1, from which claim 9 depends. The term "an" should be changed to --said-- or --the--.

***Claim Objections***

5. Claim 14 is objected to because of the following informalities: claim 14 recites the same claim limitations as claim 9 with the same dependency and is therefore redundant as currently presented. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

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6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3-7 and 9-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Moore, Jr. et al. (US Patent No. 5,511,516).

Claim 1:

Moore teaches a method of manufacturing a combustion chamber of a water heater, the method comprising forming a skirt (32, 34); and circumferentially welding an edge portion of a plate (53) to the skirt, thereby forming a seal between the plate and the skirt (col. 3, lines 54-55). Moore teaches that welding is used to provide a permanent gas tight joint (col. 3, lines 40-42). The edge of the plate is inherently spot welded to the skirt upon initiation of the welding step, i.e. when the plate is welded the manufacturer must start at a spot, therefore spot welding.

Claim 3:

Moore teaches that the skirt is formed so as to comprise a circumferentially expanded portion (lower 80% of the skirt).

Claim 4:

Moore teaches that the edge portion of the plate is welded to the expanded portion of the skirt (figure 1).

Claim 5:

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Moore teaches welding (col. 3, lines 43-45) a burner support (36) to the plate (53), via connection with the skirt.

Claim 6:

Moore teaches that the step of welding a burner support comprises welding a bracket (36, 38) to the plate.

Claim 7:

Moore teaches that welding the burner support to the plate. It must therefore be inherent that the plate is configured for such an operation to be performed.

Claims 9, 10 and 14:

Moore teaches that the welding step comprises welding the edge portion of the plate to the inner surface of the skirt (figure 1).

Claim 11:

Moore teaches that the skirt is substantially cylindrical (figure 1).

Claim 12:

Moore teaches that the plate is substantially round and is sized to be pressed into tight fitting (air tight) arrangement with the skirt.

Claim 13:

Moore teaches that the plate is pressed in to tight fitting (air tight) arrangement with the skirt which inherently creates a seal.

Claim 15:

Moore teaches that the welding step comprises a secondary air tight seal between the plate and the inner surface of the skirt.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Lesage et al. (US Patent No. 5,722,149). Moore teaches the structure of claim 1 above but does not explicitly teach the steps for forming the cylindrical skirt portion. Lesage teaches a method for the fabrication of metal cylinders for various uses including structural members of water heaters (abstract). Lesage teaches rolling sheet metal (18) to position edges thereof (19, 20) proximal one another and welding the edges (figure 3) to form a cylindrical member. It would have been obvious to one of ordinary skill in the art at the time of invention to use the process of forming cylindrical sheet metal parts taught by Lesage when manufacturing the skirt of Moore since forming cylindrical member from sheet metal is the most efficient means for forming thin walled cylindrical metal parts with little to no waste of material.

***Allowable Subject Matter***

10. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to explicitly teach the step of substantially closing openings on

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the plate where the burner support is to be welded to the plate in combination with the other limitations of the claim.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Koehler whose telephone number is (571) 272-3560. The examiner can normally be reached on Mon.-Fri. 7:30A-4:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CMK



DAVID P. BRYANT  
SUPERVISORY PATENT EXAMINER

4/16/07